American Council on Education
http://www.acenet.edu

The Health of E-learning: Sickly or Soaring?

By Mary Beth Lakin

"*There is nothing so cold as yesterday's invincible revolution. Five years ago e-learning was everybody's buzz—the promise of a trillion dollar market wrapped around the prospects of anytime-anywhere learning. All that is now gone, replaced by a pervading sense of disappointment*. . . ."

Thus reads the introductory paragraph of "Thwarted Innovation" in Remaking the American University: Market-Smart and Mission-Centered(Zemsky, Wegner, & Massy, 2005), a publication on the numerous challenges facing higher education today. It is one example of the current slew of reports and conferences on the state of e-learning. Much of the discussion focuses on the unrealized potential to change higher education's landscape—especially teaching and learning. Still, while a few in higher education are checking for e-learning's vital signs, many others have success stories, and believe measures can be implemented that clearly underscore healthy achievements.

To better understand what has been fascinating and frustrating about e-learning for the last two decades, an international meeting of government, business, and education leaders convened in June 2005 at the Organisation for Economic Cooperation and Development (OECD)/Canada/Alberta E-learning Conference. Participants discussed the findings from an OECD-sponsored survey of 19 colleges and universities in 13 countries that represent the Asia-Pacific region, Europe, North America, and South America. Focusing on research, policies, and practices, conference attendees hoped to share collaborative strategies across borders, thereby advancing e-learning's growth.

What the Research Found

The OECD report E-learning in Tertiary Education: Where Do We Stand? documented a severe lack of data to uphold many of the articulated, but often assumed, benefits of e-learning in higher education. Although plenty of anecdotal evidence can be found, adequate data still do not exist to reinforce claims of changes (or lack thereof) in pedagogy, student outcomes, and cost benefits.

The crux of these findings is further supported by another contemporary project. Thwarted Innovation: What Happened to E-learning and Why (The Learning Alliance Weatherstation Project, University of Pennsylvania), tracked changes in attitudes and practices on six university and college campuses over a 15-month period. Identifying and exploring three assumptions about e-learning—*If we build it, they will come*; t*he kids will take to e-learning like ducks to water*; and e*-learning will force a change in the way we teach*—the researchers used interviews, web-based surveys, and observations to analyze potential changes.

These studies found that e-learning in higher education has yet to bring about noteworthy financial gains for institutions. Moreover, sufficient data about students enrolled in e-learning courses does not yet exist. E-learning also has not changed most faculty teaching practices. Future research must evaluate the economic benefits to universities and colleges, including potential cost efficiencies. Research also should illuminate faculty roles, especially professional development needs and incentives for change, and lay out a taxonomy of e-learning students—their experiences, expectations, needs, and wishes.

What About the Faculty?

The Program in Course Redesign (PCR), initiated by the United States' National Center for Academic Transformation, is one research project that examines faculty and e-learning. PCR worked with a group of

institutions that wanted to use e-learning to improve low retention and success rates in large general education classes. The results have been positive, with a majority of the participating community colleges and universities showing decreases in the number of dropouts, failures, and withdrawals, and increases in grade point averages across a range of general education courses.

Tackling problems of interest, such as course success and retention, helps faculty better understand the use e-learning in supporting student outcomes. It engages faculty and instructs them about their teaching practices *and* their students. In addition, such problem-based research helps institutions assess specific professional development needs in e-learning and pedagogy.

What About the Students?

By next year, 1 million U.S. students will be totally online; in China, the number will be 800,000. What do we know about these students? Not enough. Students are largely an untapped force in e-learning research. Because of the diverse groups of students in postsecondary education and a blurring of the lines across student populations, we should no longer make assumptions about students' attitudes, skill levels, or access, based on group membership.

One notable finding from the Weatherstation Project is that faculty, after having more experience with e-learning and their students, changed their minds about the students' level of enthusiasm. Faculty explained that their initial beliefs were challenged by actual experience: "Apparently no one had ever asked the students whether they actually *liked* e-learning." In another example shared at the OECD conference, Justin Frenech, student representative for the National Unions for Students in Europe, noted that graduate students in pharmacy who had *not* taken online courses were "looking forward to the Promise Land." But, many of the students who completed online courses asked, "*This* is the Promise Land?"

Such feedback from students highlights the need to learn more about how e-learning engages a wide array of learners. How could e-learning be harnessed to help incumbent and displaced workers, immigrants, seniors, and military servicemembers meet their educational goals?

To that end, PCR took a second look (Increasing Success for Underserved Students: Redesigning Introductory Courses) at its original study on redesigned courses to discover if the retention and success rates for underserved, nontraditional students changed. They did. For example, two institutions that serve large numbers of adult learners, Florida Gulf Coast University (FGCU) and Indiana University-Purdue University Indianapolis (IUPUI), significantly reduced drop, failure, and withdrawal rates in general education courses—from 45 percent to 11 percent in FGCU's fine arts course and from 39 percent to 25 percent in an introductory sociology course at IUPUI.

Across the 15 colleges and universities that PCR studied for effects on nontraditional students, researchers found that adult learners, such as those at Rio Salado College, benefited from online tutorials and immediate feedback from instructors and peers through e-mail, chat rooms, and discussion forums. Further, many adult learners used the online resources as tools for self-remediation.

Finally, one myth that PCR's research dispelled is that nontraditional students and technology do not mix. Their findings illustrated that by carefully considering course delivery elements, universities and colleges can make sure that access, bandwidth, and technology experience do not become obstacles for adult learners and other nontraditional populations. In fact, smart use of e-learning feedback tools can help adult learners overcome fears about such general education courses as English composition, college math, and introductory biology.

Sickly or soaring? The answer is *probably* both, with much more research needed. Check out *CenterPoint's* winter issue for an article on the costs of e-learning, as intense conversations about e-learning continue.